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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/528,220	03/18/2005	Mark C. Tevis	SGI-0084-PCT-US	6257
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DORITY & MANNING, P.A. POST OFFICE BOX 1449 GREENVILLE, SC 29602-1449			EXAMINER LIGHTFOOT, ELENA TSOY	
			ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/528,220	Applicant(s) TEVIS ET AL.	
	Examiner Elena Tsoy Lightfoot	Art Unit 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13, 15-18, 20, 21 and 24 is/are pending in the application.
- 4a) Of the above claim(s) 24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13, 15-18, 20 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

1. Amendment filed on December 30, 2008 has been entered. Claims 1-13, 15-18, 20, 21 and 24 are pending in the application. Claim 24, is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention.

Claim Objections

2. Objection to claims 7, 17 and 21 because of the informalities has been withdrawn due to amendment.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Rejection of claims 1-13, 15-18, 20 and 21 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention has been withdrawn due to amendment.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-3, 5-6 and 20 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kubota et al (US 5698284) and Rockrath et al (US 6835420) for the reasons of record set forth in paragraph 12 of the Office Action mailed on 10/02/2008 since amendment didn't change the scope of the invention.

8. Claims 1-13, 15-18, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kubota et al in view of Maag et al (US 6472026) for the reasons of record set forth in paragraph 13 of the Office Action mailed on 10/02/2008 since amendment didn't change the scope of the invention.

9. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kubota et al and Rockrath et al or Kubota et al in view of Maag et al, as applied above, further in view of Brack (US 4303696) for the reasons of record set forth in paragraph 14 of the Office Action mailed on 10/02/2008.

10. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kubota et al and Rockrath et al or Kubota et al in view of Maag et al, as applied above, further in view of Ishikawa et al (US 5795642) for the reasons of record set forth in paragraph 15 of the Office Action mailed on 10/02/2008.

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11. Claims 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kubota et al and Rockrath et al or Kubota et al in view of Maag et al, as applied above, further in view of Suzuki et al (US 5573831), and further in view of Mizuguchi et al (JP2002067483) for the reasons of record set forth in paragraph 16 of the Office Action mailed on 10/02/2008.

12. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kubota et al and Rockrath et al or Kubota et al in view of Maag et al, as applied above, further in view of Tulley et al (US 6688976) for the reasons of record set forth in paragraph 17 of the Office Action mailed on 10/02/2008.

13. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kubota et al and Rockrath et al or Kubota et al in view of Maag et al, as applied above, further in view of Ishikawa et al, Suzuki et al and Mizuguchi et al, Tulley et al, and Brack for the reasons of record set forth in paragraph 18 of the Office Action mailed on 10/02/2008.

Response to Arguments

Applicants' arguments filed December 30, 2008 have been fully considered but they are not persuasive.

Kubota et al and Rockrath et al

(A) Applicants argue that Kubota et al. relates to an optical recording medium. For the embodiment of Fig. 3 referred to in the Office Action, Kubota et al. describes the formation of three layers but does not indicate at any point the use of two drying steps - one each after the formation of the first and second layers. In fact, Kubota et al's first mention of a drying step is with regard to the embodiment of Fig. 4 where Kubota et al. indicates the three layers are simultaneously formed and are only then "delicately mixed together in the course of air drying or thermodrying,..." Col. 14, lines 7-14. In other words, Kubota et al's only description of drying the layers is directed at drying all three layers at the same time - not separate drying steps occurring after formation of both of the first and second layers.

The Examiner respectfully disagrees with this argument. The Examiner mentioned *specifically* that Kubota et al discloses a **plurality** of embodiments of applying the layers such

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that **wet-to-wet** coating followed by simultaneous UV curing described at column 11, lines 25-28, one of them. It is held that patents are relevant as prior art for all they contain. See MPEP 2123. Therefore, Applicants' statement that Kubota et al's first mention of a drying step with regard to the embodiment of Fig. 4 where Kubota et al. indicates the three layers are simultaneously formed and are only then "delicately mixed together in the course of air drying or thermodrying,..." Col. 14, lines 7-14 does not eliminate other embodiments such as **wet-to-wet** coating described at Col. 11, lines 25-28. The "wet-to-wet" coating technique is **well known** in the art which involves short drying step after applying each layer. The Examiner cited Rockrath et al as **evidence** to this fact.

(B) Applicants assert that Rockrath et al. also does not teach drying steps occurring after formation of both of the first and second layers. Instead, Rockrath et al. indicates that a basecoat material is applied to a primer and then dried. Next, a clearcoat material is applied and then "the two films are cured together (wet-on-wet technique)." Col. 1, lines 39-51. As such, Rockrath et al. nowhere describes two separate drying steps where each occurs after the application of a layer. In contrast to Kubota et al. and Rockrath et al., claim 1 requires at least two separate drying steps - each drying step occurring after an application step

The Examiner respectfully disagrees with this argument. First of all, there is only one drying step in wet-on-wet technique of Rockrath et al because only two layers were applied by are the wet-on-wet technique. The **essence of wet-on-wet** technique of applying multiple layers is drying (without curing) separately each layer after an application step before applying next layer, and then curing applied layers simultaneously. In other words, if there are three layers to apply (as in Applicants claim 1) – there would be two separate drying steps occurring after an application step before simultaneous curing; if there are four layers to apply – there would be three separate drying steps occurring after an application step before simultaneous curing; and so on....

Moreover, Applicants are welcome to examine references relating to **wet-on-wet** technique for producing multicoat paint systems described by Rockrath et al at Col. 1, lines 52-59.

Kubota et al in view of Maag et al.

Applicants argue that Maag et al. does not cure the deficiency of Kubota et al. Specifically, Maag et al. does not teach drying of an applied layer before application of a subsequent layer. The Office Action cites four places in Maag et al. for the proposition that

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"Maag et al. teaches..., a process for forming a multilayer structure may be carried out in different ways." However, as admitted in the Office Action, methods ii, iii, and iv relate to curing - not drying. In addition, method i) indicates the optional step of a "short flash-off" phase. However, as described in Maag et al., "flash-off" is no more than allowing solvent to evaporate from the solvent-based lacquers. See, e.g., Col. 1, lines 15-39. In contrast to both Kubota et al. and Maag et al., claim 1 and claim 21 each require at least two drying steps where each step involves drying of an applied layer before application of a subsequent layer. These steps are simply not present in Kubota et al. or Maag et al. In addition, as described in the present specification at page 7, the drying steps of claims 1 and 21 contemplate the use of another energy source to dry the applied layers so that such are dry to the touch. Maag et al. does not teach any such drying step.

The Examiner respectfully disagrees with this argument. First of all, drying steps (b) and (d) do not specify to what moisture content of dried layers drying steps are conducted such that they read of any steps of removing solvent including "short flash-off" phase. Second, it is noted that the features upon which applicant relies (i.e., *the drying steps of claims 1 and 21 contemplate the use of another energy source to dry the applied layers so that such are dry to the touch*) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Third, in contrast to Applicants argument, Maag et al does teach applying the individual lacquer layers in each case wet-on-wet, after a short flash-off phase (claimed drying step), and curing the total multi-layer lacquer finish with a single final irradiation operation (See column 8, lines 51-60); (iv) by effecting intermediate curing (i.e. also drying step) of in each case one lacquer layer, followed by undertaking the complete curing of the total structure (See column 8, line 66 to column 9, line 5).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elena Tsoy Lightfoot whose telephone number is 571-272-1429. The examiner can normally be reached on Monday-Friday, 9:00AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Elena Tsoy Lightfoot, Ph.D.
Primary Examiner
Art Unit 1792

March 10, 2009

/Elena Tsoy Lightfoot/